

PROJECT DESCRIPTION TRAFFIC CONTROL ONLY - SCOPE OF WORK

THIS PROJECT INVOLVES THE UPGRADE OF THE TRAFFIC CONTROL DEVICES LOCATED ON THE APPROACHES TO THE DRAW SPAN OF THIS SWING BRIDGE. NEW ADVANCE WARNING SIGNS WITH HAZARD INDICATION BEACONS WILL BE ADDED TO BOTH APPROACHES. THE EXISTING TRAFFIC SIGNALS WILL BE RELOCATED. THE EXISTING TRAFFIC WARNING GATES WILL BE REPLACED ON BOTH APPROACHES. NEW TRAFFIC BARRIER GATES WILL BE ADDED ON EACH FLANKING SPANS IN ADDITION. NEW STOP LINES AND "STOP HERE ON RED" SIGNS WILL BE ADDED TO BOTH APPROACHES. THESE PLANS HAVE BEEN DEVELOPED IN CONJUNCTION WITH AND APPROVED BY MDSA - OFFICE OF TRAFFIC AND SAFETY.

THE CONSTRUCTION STAGING SCHEDULE SHALL PERFORM ALL OF THE TRAFFIC CONTROL WORK THAT AFFECTS THE BRIDGE TRAFFIC GATES, SIGNALS AND GATES AT THE SAME TIME THAT THE BRIDGE IS CLOSED TO NAVIGATION. IF THE SIGNALS AND GATES ARE NOT OPERATIONAL BY THE END OF THE NAVIGATION CLOSURE, THE CONTRACTOR SHALL SUPPLY FLAGMEN AND ADDITIONAL EQUIPMENT AS REQUIRED TO STOP VEHICULAR TRAFFIC TO ALLOW THE BRIDGE TO OPEN FOR NAVIGATION TRAFFIC.

CONSTRUCTION SEQUENCE

STANDARD MDSA TRAFFIC CONTROL PLANS WILL BE REQUIRED.

THE ELECTRICAL CONTROL SYSTEM FOR THE SWING SPAN IS ALSO BEING REPLACED (SEE DRAWING NOS. E1 TO E). AS PART OF THIS WORK, THE TRAFFIC CONTROL DEVICES LOCATED ON THE BRIDGE APPROACHES WILL BE UPGRADED. THE SCOPE OF THE TRAFFIC CONTROL WORK INCLUDES:

1. INSTALL NEW POWER SUPPLY AND CONTROL WIRING WITH CONDUIT.
2. PAINT NEW STOP LINES ON ROADWAY (2).
3. REPLACE "STOP HERE ON RED" SIGNS.
4. TRAFFIC SIGNALS (2)
 - A. RELOCATE EXISTING SIGNAL POLES.
 - B. REPLACE SIGNAL HEADS.
5. REPLACE EXISTING TRAFFIC WARNING GATES (4).
6. INSTALL NEW TRAFFIC BARRIER GATES (2).
7. INSTALL NEW ADVANCE WARNING SIGNS ON BOTH APPROACHES.

GENERAL NOTES

1. SINGLE LANE CLOSURES - VEHICULAR TRAFFIC
 - A. PROVIDE FLAGMEN IN ACCORDANCE WITH MDSA STANDARD DRAWINGS.
 - B. LANE CLOSURES WILL BE ALLOWED AT THE FOLLOWING TIMES ONLY: 9 AM - 3 PM; AND 8 PM - 6 AM
 - C. SCHEDULE FOR PROPOSED LANE CLOSURES SHALL BE APPROVED BY DISTRICT 5 PRIOR TO STARTING THE WORK.
2. EQUIPMENT - ALL NEW TRAFFIC CONTROL EQUIPMENT SHALL BE IN CONFORMANCE WITH THE MARYLAND BOOK OF STANDARDS AND MDSA CAT. CODE #'S AS SHOWN IN THE EQUIPMENT SCHEDULE SHOWN ON THIS DRAWING. ADDITIONAL DETAILS FOR THE JUNCTION BOXES AND MISCELLANEOUS COMPONENTS ARE SHOWN ON DRAWING NO. E-19 TO E-21.
3. DEMOLITION - THE CONTRACTOR SHALL CONTACT MDSA PRIOR TO STARTING WORK THAT WILL AFFECT THE TRAFFIC CONTROL EQUIPMENT. MAINTAIN EXISTING TRAFFIC CONTROL EQUIPMENT UNTIL NEW IS OPERATIONAL. EXISTING TRAFFIC SIGNAL EQUIPMENT THAT IS NO LONGER REQUIRED, SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. EQUIPMENT DESIGNAED TO BE SALVAGED BY THE MDSA, SHALL BE CAREFULLY REMOVED AND SHIPPED TO THE DESIGNATED MDSA SHOP BY THE CONTRACTOR.

CONTACTS FOR BRIDGE INSPECTION AND REMEDIAL ENGINEERING

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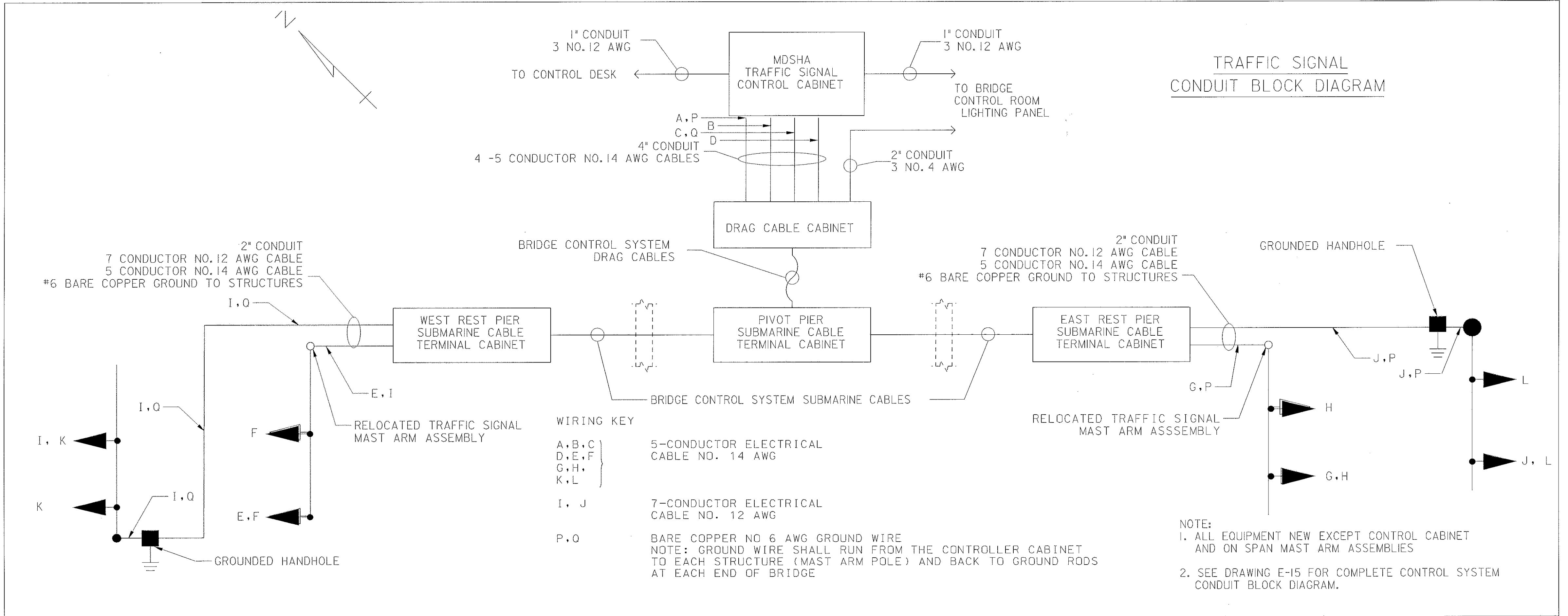
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A. EQUIPMENT TO BE FURNISHED BY SHA AND INSTALLED BY THE CONTRACTOR				DESCRIPTION	
ITEM NO.	QTY.	CAT. CODE #	SPEC #		
9089	105 SF	900000		FLAT SHEET ALUM SIGN-YELLOW, ORANGE, & SILVER (SF)	
				2 EA W 3-? 120"x60" (DRAWBRIDGE, PREPARE TO STOP, WHEN FLASHING)	
				2 EA R10-6A 24"x30" (STOP HERE ON RED)	
9010	2 EA	900000		(CONT/CAB/ADD) RELAY (110/120 VOLT) 11 PIN	
9000	16 EA	900000		12 INCH SIGNAL HEAD SECTION	
9000	2 EA	900000		27 FOOT STEEL POLE WITH 34' BUTT SECTION AND ACHOR BOLTS	
9000	4 EA	900000		(MAST ARM MT) 12 INCH 1-WAY 3-SECTION POLYCARBONATE HEAD - BLACK FACED	
9012	4 EA	900000		(MAST ARM MT) 12" 1-WAY, 1-SECTION SIGNAL (POLYCARBONATE) - BLACK FACE	
B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR				DESCRIPTION	
ITEM NO.	QTY.	CAT. CODE #	SPEC #		
1001	1 EA	120500	104	MAINTENANCE OF TRAFFIC	
5004	26 LF	585624		24 INCH WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS	
8001	9.5 CY	801004	801	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION	
8002	80 LF	870116	805	FURNISH AND INSTALL 2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED	
8006	760 LF	861107	810	FURNISH AND INSTALL ELECTRICAL CABLE-5 CONDUCTOR (NO.14 AWG)	
8007	3350 LF	800000	810	FURNISH AND INSTALL ELECTRICAL CABLE-7 CONDUCTOR (NO.12 AWG)	
8008	3400 LF	802501	810	FURNISH AND INSTALL NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	
8009	100 SF	813015	813	INSTALL OVERHEAD SIGN	
8010	2 EA	811001	811	FURNISH AND INSTALL ELECTRICAL HANDHOLE	
8011	2 EA	837001	804	FURNISH AND INSTALL GROUND ROD 3/4" DIAMETER X 10 FOOT LENGTH	
8012	5625 LF	800000	805	FURNISH AND INSTALL 2" RIGID GALVANIZED STEEL ON STRUCTURE	
8013	2 EA			FURNISH AND INSTALL 12 x 12 x 6 STAINLESS STEEL PULL BOXES ON STRUCTURE	
8014	XXXX LBS			FURNISH AND INSTALL HOT DIPPED GALVANIZED STEEL CONDUIT SUPPORTS ON STRUCTURE	
8015	40 LF	833016	805	FURNISH AND INSTALL 2 INCH FLEXIBLE CONDUIT	
8016	2 EA	866204	818	INSTALL STEEL POLE AND SINGLE MAST ARM (ANY SIZE)	

SEQUENCE CHART									
	1	2	3	4	5	6	7	8	9
	(Y)	(Y)	(R)	(R)	(R)	(R)	(R)	(Y)	(Y)
			(Y)	(Y)	(Y)	(Y)	(Y)		
			(G)	(G)	(G)	(G)	(G)		
PHASE 2 & 6	DARK	DARK	G	G	G	G	G	DARK	DARK
PHASE 2 & 6 CLEARANCE	FLY	FLY	G	G	G	G	G	FLY	FLY
PHASE 2 & 6 CHANGE	FLY	FLY	Y	Y	Y	Y	Y	FLY	FLY
PRE-EMPT PHASE 3	FLY	FLY	R	R	R	R	R	FLY	FLY
PHASE 3 CHANGE	FLY	FLY	R	R	R	R	R	FLY	FLY
FLASHING OPERATION	DARK	DARK	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK

note: signal head 5 to be removed



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
MD 231 AND PATUXENT RIVER BRIDGE

BRIDGE NO.: 4008

DRAWN BY: E RECIO	F.A.P. NO.	TS NO. 773 B	SHEET NO.
CHECKED BY: PAUL CONNOLLY	S.H.A. NO.		
SCALE: 1" = 20'	COUNTY: CHARLES & CALVERT	T.I.M.S. NO. E 124	
DATE: 8/2001	LOG MILE: 04023100.00		02 OF 02